

Seeking Synergy: New Perspectives on Addressing Interrelated Global Health and Development Problems

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In September 2000, the United Nations (UN) Millennium Declaration¹ established the Millennium Development Goals (MDGs) to accelerate efforts to reduce extreme poverty and related barriers to human development. At the Rio+20 World Summit on Sustainable Development, the UN decided to embark on a process to develop Sustainable Development Goals (SDGs), which are intended to come into effect in 2015, the target date of the MDGs.

As we approach 2015, people around the world face an increasingly complex set of environmental, economic, and health challenges. Since 2000, a number of disturbing, potentially interrelated trends have emerged with greater clarity. For example, more than half of the world's population now lives in cities, and that number is expected to grow to 70 percent by 2050 (WHO, 2012a). Noncommunicable diseases, including diabetes, chronic obstructive pulmonary disease, cardiovascular diseases, and cancer, now claim more lives around the world than infectious diseases (UN General Assembly, 2011). At the same time, evidence has grown for the interconnectedness of the environment, economic development, and human health.

The World Health Organization (WHO) has concluded that almost a quarter of the total disease burden in the world is related to

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modifiable environmental risk factors (WHO, 2004). Substantial data now support the concept that the earth is an integrated system in which human activities play a critical and growing role in shaping the planet's environment and ensuring sustainable habitability (Steffen et al., 2004). Globally, average temperatures continue to increase, underground water reservoirs are being depleted in many parts of the planet, extinction rates are accelerating in both terrestrial and marine ecosystems, and the scientific community has definitively concluded that these changes are the result of human activities (IPCC, 2007; Millennium Ecosystem Assessment, 2005).

The MDGs acknowledged the critical linkages between population health and human development by including three goals that explicitly target improved health

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measures (goals 4, 5, and 6).² The seventh MDG breaks new ground by focusing on environmental sustainability. But concerns have been raised that the MDGs reflect a siloed approach that fails to recognize that progress on many of the goals cannot be achieved independent of progress in other goals and sectors. While siloing facilitates clarity in measurement and communication, it leads to missed opportunities for further health improvement and sustainable economic development.

As the development of SDGs begins, we have a unique opportunity to shift the paradigm, to more fully incorporate these increasingly evident interrelationships among economic and social development, environmental protection, and human health into the SDG metrics and indicators. One path forward could be to develop pilot indicators based on examples in which the scientific evidence suggests these synergies. For example, SDGs that address energy, poverty, and child mortality could include indicators that measure replacement of primitive solid fuel cookstoves with cleaner burning models. Goals for childhood nutrition could include indicators related to sustainable agriculture practices, including climate adaptation plans for water and agriculture. Goals for reducing obesity rates could include indicators of urban design that address access to safe walking and biking routes.

“What gets measured gets done” has become an aphorism, not only in the world of business, but also in the worlds of global health and sustainable development. Emphasizing interlinkages complicates the development of goals and indicators. In many cases, the best indicator to measure the types of synergistic progress discussed here will not be clear. A recent workshop co-sponsored by the WHO and the National Institute of Environmental Health Sciences explored potential indicators for cross-sectoral health and development progress

(WHO, 2012b). Participants in the workshop recognized that adding indicators of secondary impacts, like a health or air pollution indicator in an energy goal, complicated the process of consensus building around goals and the creation of monitoring and governance systems. And in many cases, appropriate data for these interlinking indicators may not currently be collected broadly or even identified. But without cross-sectoral dialogue and interdisciplinary thinking about how to achieve integrated goals, it will be more difficult to solve the complex problems at the nexus of global health, environmental change, and economic development. We are sure that health can continue to play a key role in the global development framework that will emerge from the transition to SDGs, and hope that these discussions will stimulate the development of new paradigms for integrated problem solving that will help illuminate the paths to health and sustainable well-being for all.

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Notes

1. For more information about the UN Millennium Declaration, see <http://www.un.org/millennium/declaration/ares552e.pdf>.
2. The Millennium Development Goals are (1) eradicate extreme poverty and hunger, (2) achieve universal primary education, (3) promote gender equality and empower women, (4) reduce child mortality, (5) improve maternal health, (6) combat HIV/AIDS, malaria, and other diseases, (7) ensure environmental sustainability, and (8) create a global partnership for development with targets for aid, trade, and debt relief. For more information about the Millennium De-

velopment Goals, see <http://www.un.org/millenniumgoals>.

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